KUZNETSOV,M.A.

Machine tool for rolling of frame and circular saws. Der.prom.4 no.9:15-16 S '55. (MLRA 8:11)

1. Sibirskiy lesotekhnicheskiy institut
(Saws) (Rolling (Metalwork))

KUZNETSOV, M.A.

Balancing and cutting radius control tool for planer blades and milling cutters. Der.prom.4 no.10:13-14 O '55. (MLRA 9:1)

1.Sibirskiy lesotekhnicheskiy institut.
(Cutting tools) (Balancing of machinery)

KUZNETSOV, M.A.

Pendulum impact testing machine to determine specific work in woodcutting. Der.prom. 5 no.11:18-19 N '56. (MLRA 10:1)

1. Sibirskiy lesotekhnicheskiy institut.
(Woodworking machinery)

KUZNETSOV, Mikhail Aleksandrovich; SHKYNOV, I.I., red.; DONNIKOVA, A.A., red.izd-va; VDOVINA, V.M., tekhn.red.

[Atlas of designs for woodworking machines] Atlas konstruktsii derevoobrabatyvaiushchikh stankov. Moskva, Goslesbumizdat, 1963. 248 p. (MIRA 16:12)
(Woodworking machinery—Design and construction)

KUZNETSOV, M.A.

Business accounting within telecommunication enterprises and ways to strengthen it. Vest. sviazi 25 no.6:28-29 Je '65. (MIRA 18:11)

1. Nachal'nik otdela metodologii Planovo-finansovogo upravleniya Ministerstva svyazi SSSR.

KUZNETSOV, M.I., kand. veterin. nauk

Intermediate hosts of Thysaniezia and Avitellina infesting sheep.
Veterinariia 39 no.7:46-47 Jl '62. (MIRA 18:1)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I.Skryabina.

KUZNETSOV, M.A., veterinarnyy vrach (Shchigrovskiy rayon, Kurskoy oblasti).

Practices in the treatment and prophylaxis of edema disease in young pigs. Veterinariia 38 no.3:40-42 Mr '61 (MIRA 18:1)

AUTHOR: Kuznetsov, M.D., Professor SOV/[illegible]-3-6-24/43

TITLE: Experience of the Work of the Stalino Oblast [illegible]ard (Opyt raboty Stalinskogo oblastnogo pravleniya)

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1958, Vol III, Nr 6, pp 621-622 (USSR)

ABSTRACT: The Stalino Oblast Board of the All-Union Chemical Society has 500 chemists as members. It consists of 5 primary organizations and 2 sections. At intervals of 2 months conferences are convened in chemical plants. The papers presented deal with the following subjects: development of the chemical industry in the Stalino economic district; cleaning of waste gases in the production of sulfuric acid; cleaning of waste waters of chemical plants, etc. There are narrow connections with the Stalino National Economic Council, the Scientific-Technical Department of Metallurgists, the Trade Union, etc.

Card 1/1

KUZNETSOV, M.D.

Diagnostic errors in cancer of the bronchi. Trudy LMI 2:140-151 '55 (MIRA 11:8)

1. Kafedra gospital'noy terapii (zav. - deystvitel'nyy chlen AMN SSSR porf. M.V. Chernorutskiy) Pervogo Leningradskogo meditsinskogo instituta imeni akademika I.P. Pavlova.
(BRONCHI--CANCER)

KUZNETSOV, M.D.; LANG-HELCHOGOVA, N.S.

Effect of the type of higher nervous activity on the course of peptic ulcer. Terap. arkh. 28 no.1:12-17 '56 (MLRA 9:6)

1. Iz terapevticheskogo sektora Instituta fiziologii imeni I.P. Pavlova AN SSSR i gospital'noy terapevticheskoy kliniki (zav.-deystvitel'nyy chlen AMN SSSR prof. M.V. Chernorutskiy) I. Leningradskogo meditsinskogo instituta imeni I.P. Pavlova.

(PEPTIC ULCER, physiology,
higher nervous funct., relation of type to course of dis. (Rus))
(CENTRAL NERVOUS SYSTEM, in various diseases,
peptic ulcer, relation of type of higher nervous funct. to course of dis. (Rus))

KUZNETSOV, M. D. (Prof.)

Designs of Equipment for Recovery of Chemical Products of Coking (Raschety apparatury dlya ulavlivaniy khimicheskikh produktov koksovaniya), by I. E. Korobchanskiy (Prof) and M. D. Kuznetsov (Prof), published by State Scientific Technical Publishing House of Literature on Ferrous and Nonferroud Metallurgy, 1952, 286 pages.

Description of the apparatus and the diagrams and principles of their operation were prepared by Prof. I. E. Korobchanskiy. The theoretical computations on capacity, heat balance, and basic dimensions were made by Prof. M. D. Kuznetsov.

Phase I

Kuznetsov, M.D.

Korobyanskiy, I. E., and Kuznetsov, M. D.: Raschety apparatury dlya ulavlivaniya khimicheskikh produktov koksovaniya (Design of Apparatus for Recovery of Chemical Products in Coking). Moscow: Metallurgizdat. 1953. 340 pp. Reviewed in *Khimicheskiy Zhurnal* 9, 109(1954).

(1)

Kuznetsov, M.D.

USSR/Processes and Equipment for Chemical Industries K-1
Processes and Apparatus for Chemical Technology

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 14186

Author : Kuznetsov M.D., Sagalovskiy Sh.M.
Inst : Department of Chemical Technology, Donets Industrial Institute
Title : Method for Calculation of Hydrogen Sulfide Removal from Gases with Iron Hydroxide

Orig Pub : Tr. Khim.-tekhnol. fak. Donetsk. industr. in-ta, 1956, No 1, 14-18

Abstract : A method is proposed for calculating the dimensions of the absorption equipment that is based on the theory of dynamic activity of solid absorbents and which makes it possible to determine the cross section of apparatus, necessary volume and depth of absorbent layer taking into account the concentration of H_2S in the gas, the hydraulic resistances, activity of absorbent, output of the unit and duration of operation of the unit before re-charging.

Card 1/1 - 24 -

Kuznetsov, M.D.

USSR/Processes and Equipment for Chemical Industries-- K-1
Processes and apparatus for chemical technology.

Abs Jour: Ref Zhur-Khimiya, No 3, 1957, 10617

Author : Kuznetsov, M. D.
Inst : Donets Industrial Institute
Title : A Method for the Calculation of Material Balances for Condensation Equipment Used in the Production of Benzene in Byproduct Coke Plants

Orig Pub: Tr. Khim. tekhnol. fak. Donetsk. industr. in-ta, 1956, No 1, 19-28

Abstract: A method is proposed for the calculation of the upper portion of the column used in the distillation of the crude benzene from the absorbing oils, of the fractionating column, and of the condenser; the method makes possible the calculation of the number of plates required, of the temperature regime of the column, fractionating column and condenser, of the composition and amount of the liquid and gas phase in these units.

Card 1/1

KUZNETSOV, M.D.

KOROBCHANSKIY, N.Ye. [deceased]; KUZNETSOV, M.D., dekter tekhnicheskikh nauk; EYDEL'MAN, Ye.Ya., kandidat tekhnicheskikh nauk; POTASHNIKOVA, M.M., inzhener; KOROBCHANSKIY, V.I., kandidat tekhnicheskikh nauk; SIRENKO, N.P., kandidat tekhnicheskikh nauk.

Investigating the process of selective crushing of some Donets Basin coals. Koks i khim.no.6:8-13 '56. (MLRA 9:10)

1.Chlen-korrespondent Akademii nauk USSR (for N.Ye.Korobchanskiy).
2.Donetskiy industrial'nyy institut imeni N.S.Khrushcheva.
(Coal preparation)

KUZNETSOV, M.D.; MYDEL'MAN, Ye.Ye.

The quality of coke in connection with grains larger than 6mm contained in a blended coal charge. Koks i khim. no.7:11 '56. (MLRA 9:12)

1. Donetskiy industrial'nyy institut.
(Coke)

SOV/68-58-2-9/20

AUTHORS: Kuznetsov, M.D., Sagalovskiy, Sh.M. and Popova, Ye.V.

TITLE: An Investigation of the Absorption of Ammonia from Coke-oven Gas with Sulphuric Acid in an Injection Type Apparatus (Issledovaniye pogloshcheniya ammiaka iz koksovogo gaza sernoy kislotoy v apparate inzhektsionnogo tipa)

PERIODICAL: Koks i Khimiya, 1959, Nr 2, pp 32 - 34 (USSR)

ABSTRACT: The absorption of ammonia from coke-oven gas in a Ventury type sprayer was investigated. Experiments were carried out in a laboratory apparatus (Figure 1) using two types of Venturi tubes (dimensions are given in the table) at gas velocities 35-91.5 m/sec (Venturi tube 1 - diameter 15 mm) and 35-66.2 m/sec (Venturi tube 2, diameter 30 mm). Specific consumption of the absorbent (saturated solution of ammonium sulphate containing up to 6-6.5% of free acid) was 0.65 litres/m^3 of gas. The influence of gas velocity in the Venturi tube on the degree of absorption is shown in Figure 2. It was found that with increasing gas velocity the degree of absorption increases; the larger tube gave better results than the smaller one. The degree of ammonia absorption reaches 99.8%. The influence of the specific consumption of the absorbent on the degree of absorption was

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An Investigation of the Absorption of Ammonia from Coke-oven Gas With Sulphuric Acid in an Injection Type Apparatus

investigated for a range of 0.35-1.1 litres/m^3 of gas at a constant gas velocity of 50 m/sec. The results obtained are shown in Figure 3. It was found that with increasing consumption of the absorbent, the degree of absorption increases and with increasing size of the Venturi tube the degree of absorption also increases. The dependence of the gas velocity in the tube on the pressure loss at a constant consumption of absorbent of 0.65 litres/m^3 is shown in Figure 4. Within the range of velocities from 35 to 66 m/sec the pressure drop amounted to 120 - 320 mm of H_2O. Using two Venturi tubes with the pressure loss of 120 mm per tube, the degree of absorption of 99.4% can be obtained. It is concluded that the investigated type of apparatus can be utilised in the production of ammonia sulphate on coke-oven works. There are 4 figures.

ASSOCIATION: Donetskiy industrial'nyy institut (Donets Industrial Institute)

Sov/68-59-10-11/24

AUTHORS: Kuznetsov, M.D., and Sagalovskiy, Sh.M., Korobchanskiy, V.I., Lyannaya, Z.G., and Popova, Ye.V.

TITLE: An Additional Dephenolisation of Spent Ammonia Liquor in an Injection Type of Apparatus

PERIODICAL: Koks i khimiya, 1959, Nr 10, pp 37-39 (USSR)

ABSTRACT: After dephenolising spent ammonia liquor with steam in filled scrubbers, the residual content of phenols amounts up to about 0.6 g/litres. The possibilities of an additional dephenolising in an injection type apparatus has been tested on the Makeyevka Works. The apparatus consists of a Venturi tube conveying a stream of steam, intc the narrow part of which (throat) spent liquor is injected. The latter is dispersed into fine drops, thus developing a large area of contact between the gaseous and liquid phases. A similar apparatus was used for the dispersion of alkali solution with steam containing phenols which pass into the solution forming phenolates. The diagram of the experimental installation is shown in fig 3. After each venturi sprayer, the separation of gas and vapour phases was done in

Card 1/3

cyclones. The dependence of the degree of dephenolation of water on specific steam consumption at various steam velocities is shown in fig 1. A 77 to 90% dephenolation takes place on changing the consumption of steam from 2 to 5 m^3/litres, whereupon the concentration of phenols in water varied from 0.035 to 0.015 g/litre, ie, a high degree of purification was obtained. Data on the absorption of phenols from steam are given in fig 2. The coefficient of the useful action of the apparatus changes from 82.3 to 87.9% on changes in the steam velocity from 35 to 80 m sec for solutions containing below 6% of phenols. On the basis of the data obtained the degree of dephenolation of water after scrubbers for a system of recirculation of steam was calculated. The basic data: concentration of phenols in the feed water $C_1 \approx 0.2$ g/litre; the content of phenols in the alkali solution into dephenolising scrubber: $n_1 \approx 6$, 8 and 10 g/litre; the amount of recirculated steam $V \geq 2.5$ and 5m^3/litre of water. The results are given in the table,

An Additional Dephenolisation of Spent Ammonia Liquor in an Injection Type of Apparatus

where: η - the degree of desorption of phenols from water %; C - concentration of phenols in dephenolised water, g/litre; S - consumption of fresh alkali solution, litre/m^3 of water. The content of phenols in the dephenolised water would be from 0.0247 to 0.0433 g/litre. Pressure drop in the ventury sprayer will be 350-400 mm H_2O. There are 3 figures, 1 table and 4 Soviet references.

ASSOCIATION: Donetskiy industrial'nyy institut
(Donets Industrial Institute)

KUZNETSOV, M.D., LEONENKO, V.M., ORATOVSKIY, V.I.

Absorption of naphthalene from coke-oven gas by solar oil in an apparatus pulverizing the liquid by a stream of gas. Koks i khim. no.3:34-36 '60. (MIRA 13:6)

1. Donetskiy industrial'nyy institut.
(Rutchenkovo--Naphthalene) (Rutchenkovo--Coke-oven gas)

KUZNETSOV, M.D.; LYANNAYA, Z.G.

Composition and properties of large-sized coal types of the Donets Basin. Koks i khim. no.5:10-13 '60.
(MIRA 13:7)

1. Donetskiy industrial'nyy institut.
(Coal)

KUZNETSOV, M.D.; LYANNAYA, Z.G.

Operation of the dephenolizing scubbers of some oven-coke plants.
Koks i khim. no.12:38-40 '60. (MIRA 13:12)

1. Donetskiy politekhnicheskiy institut.
(Coke industry--By-products)

KUZNETSOV, M.D.; LEONENKO, V.M.; ORATOVSKIY, V.I.

Analysis of the operation of primary tubular coolers. Koks i khim. no. 3:44-46 '61. (MIRA 14:4)

1. Donetskiy politekhnicheskiy institut.
(Coke-oven gas)

KUZNETSOV, M.D.; NEPOMNYASHCHIY, I.L.; NOVITSKIY, P.L.; LYANNAYA, Z.G.

Drying ammonium sulfate in a dryer with a direct shifting of the fluidized bed. Koks i khim. no.8:39-42 '61. (MIRA 15:1)

1. Donetskiy politekhnicheskiy institut.
(Ammonium sulfate) (Drying apparatus)

KUZNETSOV, M.D.; FAYNGOL'D, S.G.; FILIPPOV, A.A.

Concerning [redacted] notes. Koks i khim. no.3:64 '62.
(MIRA 15:3)

1. Donetskiy industrial'nyy institut (for Kuznetsov).
2. Yasinovskiy koksokhimicheskiy zavod (for Fayngol'd, Filippov).
(Scrubber (Chemical technology)) (Phenols)

KUZNETSOV, M.D.; ORATOVSKIY, V.I.

Rate of chemical sorption in a Venturi-type apparatus. Izv.vys. ucheb.zav.; khim.i khim.tekh. 4 no.1:142-147 '61. (MIRA 14:6)

1. Donetskiy industrial'nyy institut, kafedra khimicheskoy tekhnologii topliva i protsessov i apparatov.
(Venturi tubes)

KUZNETSOV, M.D.; LYANNAYA, Z.G.

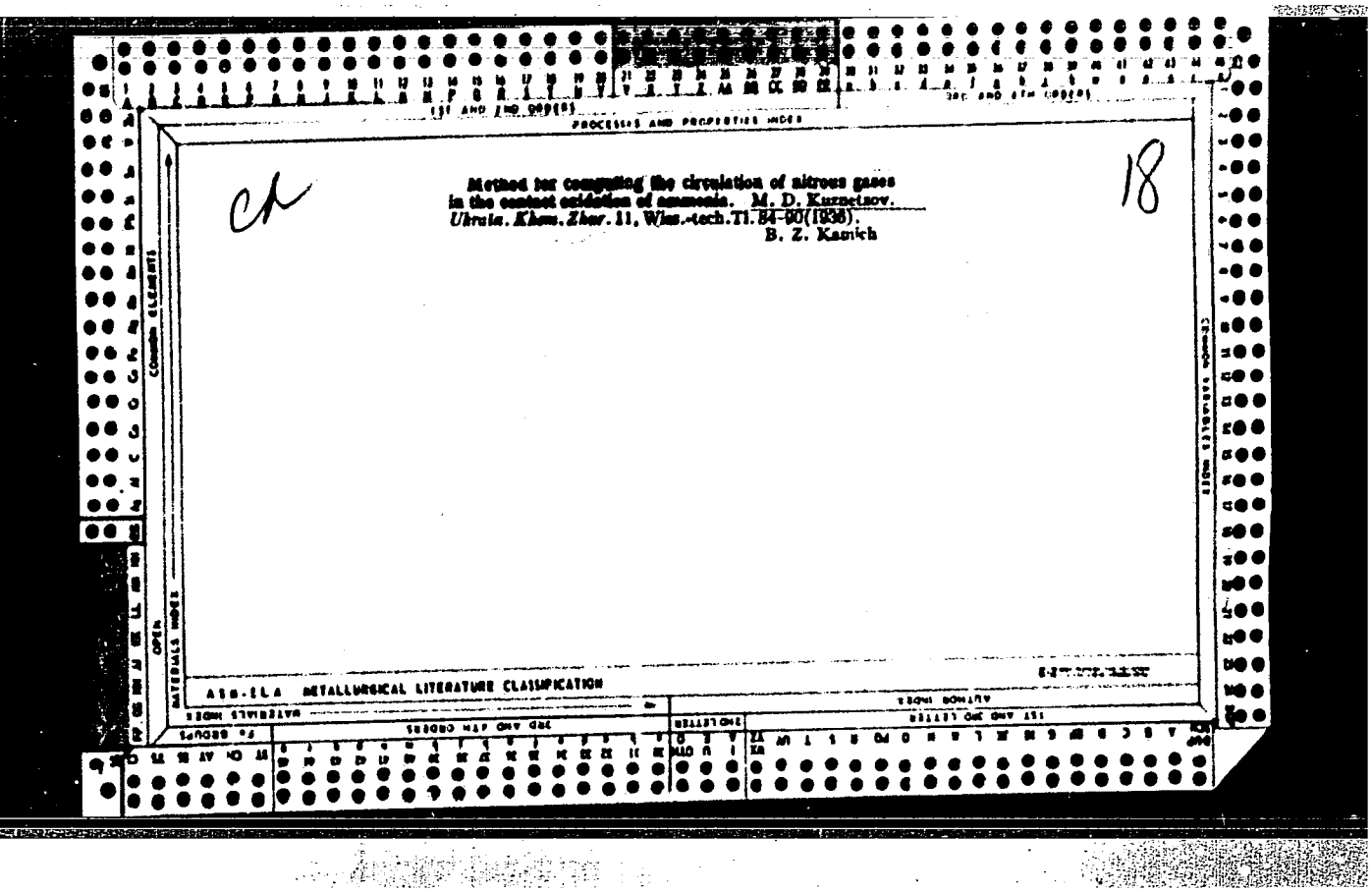
Effect of the moisture of the charge on the cooling of coke gas. Koks i khim. no.7:38-41 '63. (MIRA 16:8)

1. Donetskiy politekhnicheskiy institut.
(Coke gas—Cooling)

KUZNETSOV, M.D.; EYDEL'MAN, Ye.Ya.; ADLER, Yu.P.; FRENKEL', A.A.

Useful book for the chemical engineers of the coke industry.
Koks i khim. no.3:61-64 '64. (MIRA 17:4)

1. Donetskiy politekhnicheskiy institut (for Kuznetsov, Eydel'man).
2. Gosudarstvennyy nauchno-issledovatel'skiy proyektnyy institut redkometallicheskoy promyshlennosti, Moskva (for Adler, Frenkel').



Method for computing the circulation of nitrous gases in the contact oxidation of ammonia. M. D. Kuznetsov. *Ukrain. Khem. Zhur.* 11, Wiss.-tech.Tl. 84-90(1938).
B. Z. Kanich

18

KUZNETSOV, M. D. PA 64T100

USSR/Physics Jan 1948
Absorption

"Similarity Method for Calculating the Coefficients of Speed of Absorption," M. D. Kuznetsov, 10 pp

"Zhur Prik Khim" Vol XXI, No 1

Object of studies was to determine equation for calculating the coefficient of speed of absorption. Submitted 18 Apr 1947.

64T100

CA

Velocity of absorption accompanied by a bimolecular reaction. M. D. Kuznetsov. *Zhur. Prikład. Khim.* (J. Applied Chem.) **22**, 943-6(1949).—Analytical solution of the equations expressing the transport of matter across the gaseous and the liquid films, and the changes brought in by an irreversible bimol. reaction proceeding at a rate comparable with the rates of diffusion of the component and the chemisorbent, shows that the rate of the process in the liquid film is decreased, as compared with the case of a unimol. reaction, by a factor $\sqrt{3}\,c_l/(c_l + 2c_0)$, where c_l is the concn. in the liquid and c_0 is the concn. at the gas-liquid film boundary; at $c_0 = 0$, this factor becomes $\sqrt{3}$. N. Thon

USSR/Physics - Hydrodynamics 1 Aug 52

"Hydrodynamics of an Eccentric Ring-Shaped Section," M.D. Kuznetsov

"Dok Ak Nauk SSSR" Vol 85, No 4, pp 715-717

The purpose of the current report, the author states, is to clarify the hydrodynamics of eccentric circular sections for the case of laminar fluid flow. Circular cross sections are widely used in technology in various apparatuses, he notes, but their hydrodynamics have not yet been worked out as has been done in the case of concentric sections. Submitted by Acad A.I. Nekrasov 7 Apr 52.

227T69

USSR/Physics - Hydrodynamics 1 Jul 53

"Poiseuille Flow in an Asymmetric Ring-shaped Gap. An Analogy to Torsion of a Beam," Ya. V. Shevelev

DAN SSSR, Vol 91, No 1, pp 35-38

Reconsiders problem set up by M. D. Kuznetsov (1) (ibid. 85, No 4, 715 (1952)), who made the conclusion, based on an error and disregard of angular derivatives, that the hydraulic resistance of a pipe can be diminished if a round insert of small diameter is placed eccentrically in the pipe.

266T94

Hence recalculates the discharge through an asymmetric ring-shaped gap with fixed, and movable, pipes that progressively limit the gap (i.e. internal and external insert). Here considers the Boussinesq problem of applying the analogy to torsion of a beam. Presented by Acad L. D. Landau 25 Apr 53.

Kinetics of the process of absorption of hydrogen sulfide by iron hydroxide. M. D. Kuznetsov and A. F. Sagalovskii. *Zhur. Prikład. Khim.* 27, 8–11(1954).—To det. the effect of the several factors that enter the kinetics of the reaction a sphere of $Fe(OH)_3$ suspended from a thermocouple was exposed to a current of H_2S of different concns. Since this is one of the reversible, hetrogeneous reactions that leaves a film of the product on the surface, the reaction is kinetic and diffusional. The results indicate that the amt. of H_2S absorbed, Q, is not affected by the rate of flow, i.e. the gas film is not controlling. The rate of absorption, K, is not affected by the surfaces of the sphere, i.e. the reaction takes place on the surface and not in depth. The fact that Q is directly proportional to H_2S concn., C, indicates a 1st-order reaction. $K = Q/CSt = 0.835 \pm 0.001$ cm./sec. over a large range of S and t. On the basis of these facts an equation is derived expressing the kinetics of the reaction as a function of the above factors and the initial and final radii of the sphere and the ratio of H_2S over $Fe(OH)_3$ reacted.

I. Bencowitz

24(8)

SOV/63-4-3-22/31

AUTHORS: Kuznetsov, M.D., Leonenko, V.M.

TITLE: Heat Transfer in the Transition Field

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 3, pp 406-407 (USSR)

ABSTRACT: An equation has been developed for heat transfer in the transition field analogous to the turbulent field. The form of the function f (Re) is based on data of Mikheyev [Ref 6]. There are: 1 graph, 2 tables, and 6 Soviet references.

SUBMITTED: July 5, 1958

Card 1/1

KUZNETSOV, M. D., and NOVITSKIY, P. L.

"On Intensification of Heat and Mass Transfer Processes in a Boiling Layer."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

KUZNETSOV, M. D.

"Expression of Experimental Data Through the Similarity Numbers."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

KUZNETSOV, M. D.

Seedlings

Use of germinators for the cultivation of fruit seedlings. Sad i og., No. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1952, Uncl.

KUZNETSOV, M. D.

Fruit Culture

Preparing roots for transplanting mature fruit trees, Sad i og. No. 5, 1952

9. Monthly List of Russian Accessions, Library of Congress, July 1952, Uncl.

USSR / Cultivated Plants. Fruits, Berries. M-7

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 58734

Author : Kuznetsov, M. D.
Inst : Timiryazev Agricultural Academy
Title : The Vegetation-Field Method of Study of the Growth of Apple Tree Seedlings

Orig Pub : Izv. Timiryazevsk. s.-kh. akad., 1956, No 3, 91-104

Abstract : This is a description of a special type of dismountable field vegetation vessels with porous walls and bottom, designed by the author. This device permits to obtain a large similarity between the regime of soil of the sector and the one of vessels with plants, disposed in this soil. -- I. K. Fortunatov

Card 1/1

USSR/Cultivated Plants. Fruits. Berries. M

Abs Jour: Ref Zhur-Biologiya, No 5, 1958, 20480.

Author : M.D. Kuznetsov.
Inst : Moscow "Order of Lenin" Agricultural Academy im. K.A. Timiryazev.
Title : The Field Vegetation Method of Investigating Apple Seedlings. (Polevoy vegetatsionnyy metod issledovaniya seyantsev yablon').

Orig Pub: Dokl. Mosk. s. kh. adad. im. K. A. Timiryazeva, 1956, vyp. 25, 127-132.

Abstract: The construction of a field vegetation vessel was worked out and applied by the Moscow "Order of Lenin" Agricultural Academy im. K.A. Timiryazev. The vessels were sectionals with a diameter of 25 centimeters. The body of the vessels consisted of a sheet of galvanized iron (50 x 80 cm) folded into the shape of a cylinder have a large number of apertures.

Card : 1/3

USSR/Cultivated Plants. Fruits. Berries. M

Abs Jour: Ref Zhur-Biologiya, No 5, 1958, 20480.

The edge of the iron sheet and its bottom having many holes was reinforced in several places with wire or special hooks. The collected and prepared vessels were filled with earth and placed in a ditch. The plants were sown or planted in the vessels after the soil settled. In order to fix the root systems nets were set in the vessel, after washing off the plants it was possible to see the root system placement. Washing off the root systems in the vessels just described was accelerated by some 20-30 times. In agricultural chemical research the method of isolated plant feeding in water and sand cultures was used widely. Partititions were put into the vessels which were then filled with various soil mixtures, the

Card : 2/3

KUZNETSOV, M.D., dots., kand. sel'skokhozyaystvennykh nauk

Determining optimal growing conditions for apple seedlings in soil blocks [with summary in English]. Izv. TSKhA no.6:59-72 '58. (MIRA 12:1)

(Apple) (Seedlings)

KU[illegible], P.I., kand. biolog. nauk, sotsrab.; [illegible], ..., kand. biolog. nauk

Chemical defoliation of apple seedlings in nurseries. Izv. TSKHA no.5:86-99 '63. (MIRA 17:7)

KUZNETSOV, M.D., dotsent, kand. sel'skokhoz. nauk

Chemical defoliation of fruit seedlings in nurseries. Izv. TSKHA no. 1:110-118 '65 (MIRA 19:1)

1. Kafedra plodovodstva Moskovskoy sel'skokhozyaystvennoy ordena Lenina akademii imeni Timiryazeva.

1. KUZNETSOV, M. F., Eng.

2. USSR (600)

4. Steam Boilers

7. Experience in operating high pressure steam boilers. Rab. energ., 2, No. 2, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

KAGANOVICH, S.A., kand.tekhn.nauk; KUZNETSOV, M.F., inzh.

Improving the performance of the TsKKB dust collectors for coarse grinding. Elek.sta. 29 no.8:16-18 Ag '58. (MIRA 11:11)
(Coal, Pulverized) (Boilers--Furnaces)

KUZNETSOV, M. F.

"Ancient Volcanoes and Lava Flows in the Territory of the Central Siberian Plateau", Tr. Irkutskogo Un-ta, 9, No 1-2, 68-77, 1953.

In the basin of the upper reaches of the Taymura River one observes the interstratification of tuffites with limestones. The thickness of the strata here reaches one meter; their total apparent thickness is about 20-25 meters. In the region of the basin of the upper reaches of the Vilyuy River the formations are of a more complex structure than the lava volcano described. It is concluded that the volcanism process in the Central Siberian Plateau was not of single occurrence but covered a very long period of time. (RZhGeol, No 5, 1954)
SO: Sum No. 443, 5 Apr. 55

VERESHCHAGIN, N.K.; IVAN'YEV, L.N.; KUZNETSOV, M.F.

History of mammal fauna and the stratigraphy of Cenozoic sediments in western Transbaikalia. Trudy BKNII no.2:51-66 '60. (MIRA 14:10)

(Transbaikalia--Paleontology, Stratigraphic)
(Mammals, Fossil)

VOROPINOV, V.S.; KENZINA, V.L.; ODINTSOV, M.M., otv. red.; KARASEV, I.P., red.; KUZNETSOV, V.F., red.; MANDEL'BAUM, M.M., red.; NEZABYTOVSKAYA, I.A., red.; NOSEK, A.V., red.; FOMIN, N.I., red.

[Geological studies of the U.S.S.R.] Geologicheskaia izuchennost' SSSR. Moskva, Nauka. Vol.24. No.1. 1965. 177 p. (MIRA 18:9)

L 11079-66 EWT(1)/T/FCS(k) WR

ACC NR: AP6000558 SOURCE CODE: UR/0109/65/010/012/2119/2124

AUTHOR: Deryugin, L. N.; Kuznetsov, M. G.

39
B

ORG: none

TITLE: Angle-frequency sensitivity of antenna arrays and its connection with characteristics of feed waveguide

SOURCE: Radiotekhnika i elektronika, v. 10, no. 12, 1965, 2119-2124

TOPIC TAGS: antenna array, antenna feed, waveguide antenna

ABSTRACT: The angle-frequency sensitivity of an array is: $0 = f\frac{d\varphi}{df} = \frac{1}{\cos\varphi}(\gamma - \sin\varphi)$, where φ is the radiation angle, f is the frequency, γ is the group delay in a feed waveguide (zigzag or resonator-chain type), which excites the antenna with TW. As neither array parameter nor beam number determines the angle-frequency sensitivity, the latter can also be regarded as a characteristic of the feed waveguide. These conclusions are drawn: (1) Any waveguide system possesses an angle-frequency sensitivity; (2) For regular 2-wire lines and air-filled wave-

Card 1/2 UDC: 621.396.677.715.095.7

L 11079-66

ACC NR: AP6000558

guides, which have $\gamma = 1-1.5$, the angle-frequency sensitivity is 0.6—0.8° per 1% frequency variation; (3) The angle-frequency sensitivity sharply increases when the radiation angle approaches ±90° (except when $\gamma = 1$); (4) The angle-frequency sensitivity is always positive which means that with increasing frequency, the beam shifts away from the oscillator; (5) An integral relation between the radiation angle and the frequency, for any beam, can be deduced; (6) Higher angle-frequency sensitivity is connected with higher ratio of per-unit-length energy to through power. Formulas establishing relations between the angle-frequency sensitivity, losses, and maximum through power are also derived. Orig. art. has: 1 figure and 19 formulas.

SUB CODE: 09 / SUBM DATE: 10Aug64 / ORIG REF: 001

HW

Card 2/2

KUZNETSOV, M. G.: Master Tech Sci (diss) -- "The limits of application of linear theory in the analysis of the quality of speed-regulation systems". Leningrad, 1958. 18 pp (Min Higher Educ USSR, Leningrad Electrical Engineering Inst im V. I. Ul'yanov (Lenin)), 150 copies (KL, No 5, 1959, 150)

SOV/ 161-58-1-11/33

AUTHOR: Kuznetsov, Mikhail Gennadiyevich, Chief Engineer of the Scientific Research Institute of the City of Leningrad

TITLE: On the Computation of Transient Processes in Direct-Current Generators at Saturation (K raschetu perekhodnogo protsessa v generatore postoyannogo toka pri nasyshchenii)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Elektromekhanika i avtomatika, 1958, Nr 1, pp. 74-81 (USSR)

ABSTRACT: A new method of computing transient processes in a saturated d.c.generator is presented. This method differs from others which have hitherto been known. This computation is based upon the fact that the non-linear idling characteristics of d.c.machines exhibiting saturation resemble an exponential function. This method has a number of advantages. It is very simple and highly accurate. It permits to compute transient processes in d.c.machines which are caused by single actions but also such processes which are caused by an arbitrary action (an exponential action at the input of the machine, actions formed by periodic pulses). An example is computed dealing with a transient process in a d.c.generator with an independ-

Card 1/2

On the Computation of Transient Processes in Direct-Current Generators at Saturation

ent excitation. This method, however, is applicable to any connection of the exciter winding, either a parallel or a series connection. There are 6 figures and 4 Soviet references. The publication of this article was recommended by the Kafedra avtomatiki i telemekhaniki Leningradskogo elektrotekhnicheskogo instituta (Chair of Automation and Telemechanics at the Leningrad Institute of Electrical Engineering)

ASSOCIATION: NII, Leningrad

SUBMITTED: January 24, 1958

86112

S/112/59/000/012/034/097
A052/A001

16.9500 (1024, 1031, 1132)

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 12, p. 96, # 24565

AUTHOR: Kuznetsov, M.G.

TITLE: On the Problem of Linearization of Brush Contact Resistance in Rotary Amplifiers

PERIODICAL: Izv. Leningr. elektrotekhn. in-ta, 1958, No. 34, pp. 143-148

TEXT: Vibration linearization of the brush contact resistance of rotary amplifiers is used for decreasing the loop of external and idle run characteristics. Two circuits of a-c supply of brushes in a short-circuited chain of the rotary amplifier with a transverse field are considered. To obtain a vibration circuit, a chain with a transformer is used. In one of the circuits the secondary winding of the transformer is connected in series between short-circuited brushes. Thereby an alternating electromotive force is induced in the armature of the rotary amplifier. In the second circuit alternating current flows through 2 brushes,

Card 1/2

S/112/59/000/012/034/097
A052/A001

On the Problem of Linearization of Brush Contact Resistance in Rotary Amplifiers

arranged on the same brush screws, and through collector plates; thereby alternating current does not enter the armature chain. At a frequency of alternating current, supplied to the brushes, of 50 cycles small pulsations of a low frequency have been observed. It is recommended to use a frequency other than a multiple of 50 cycles. Vibration linearization makes the brush contact resistance independent of the value of direct current in the armature chain of the machine. It is recommended to use the same transformer both for demagnetization of the stator yoke and linearization.

V.I.R.

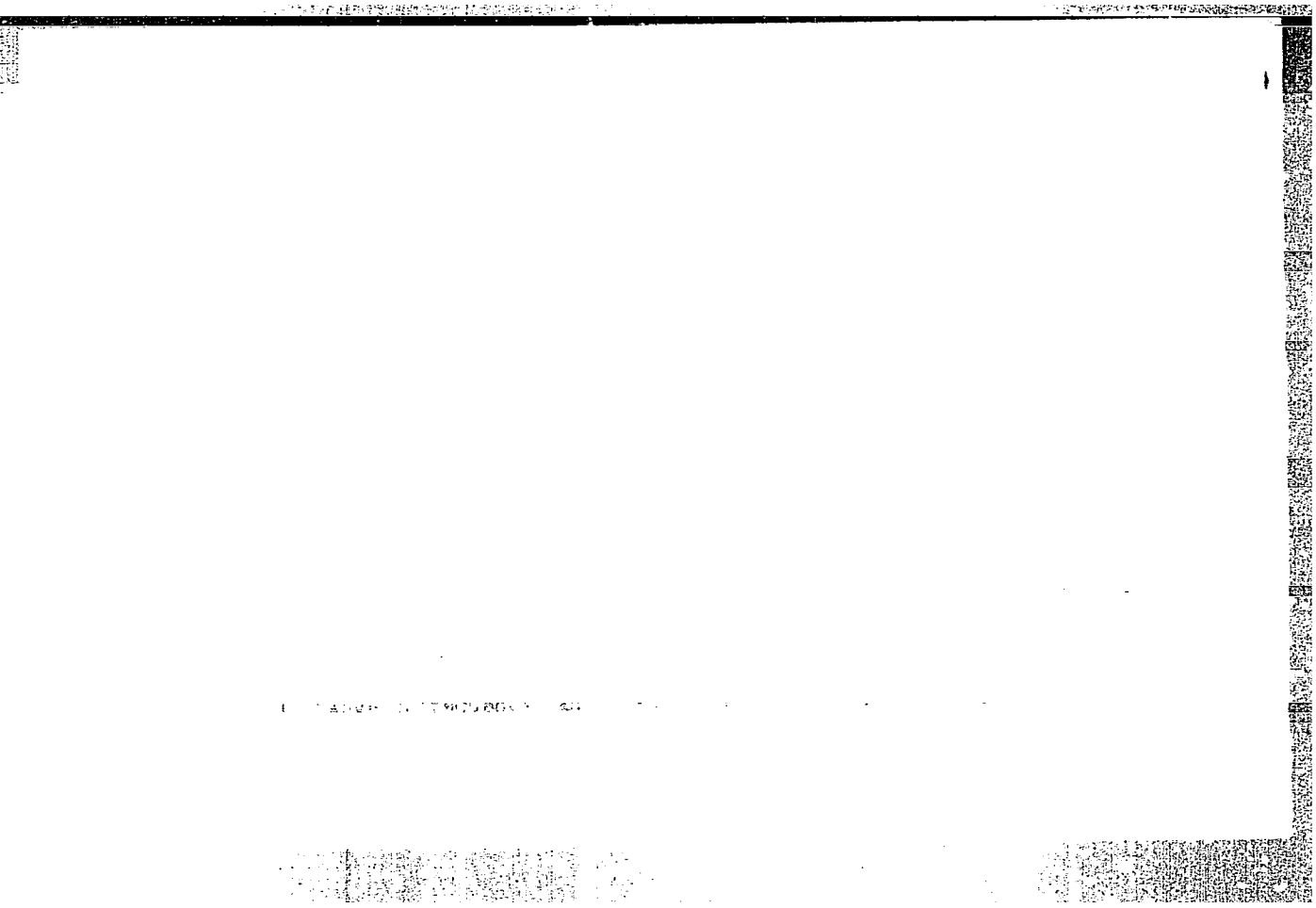
Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

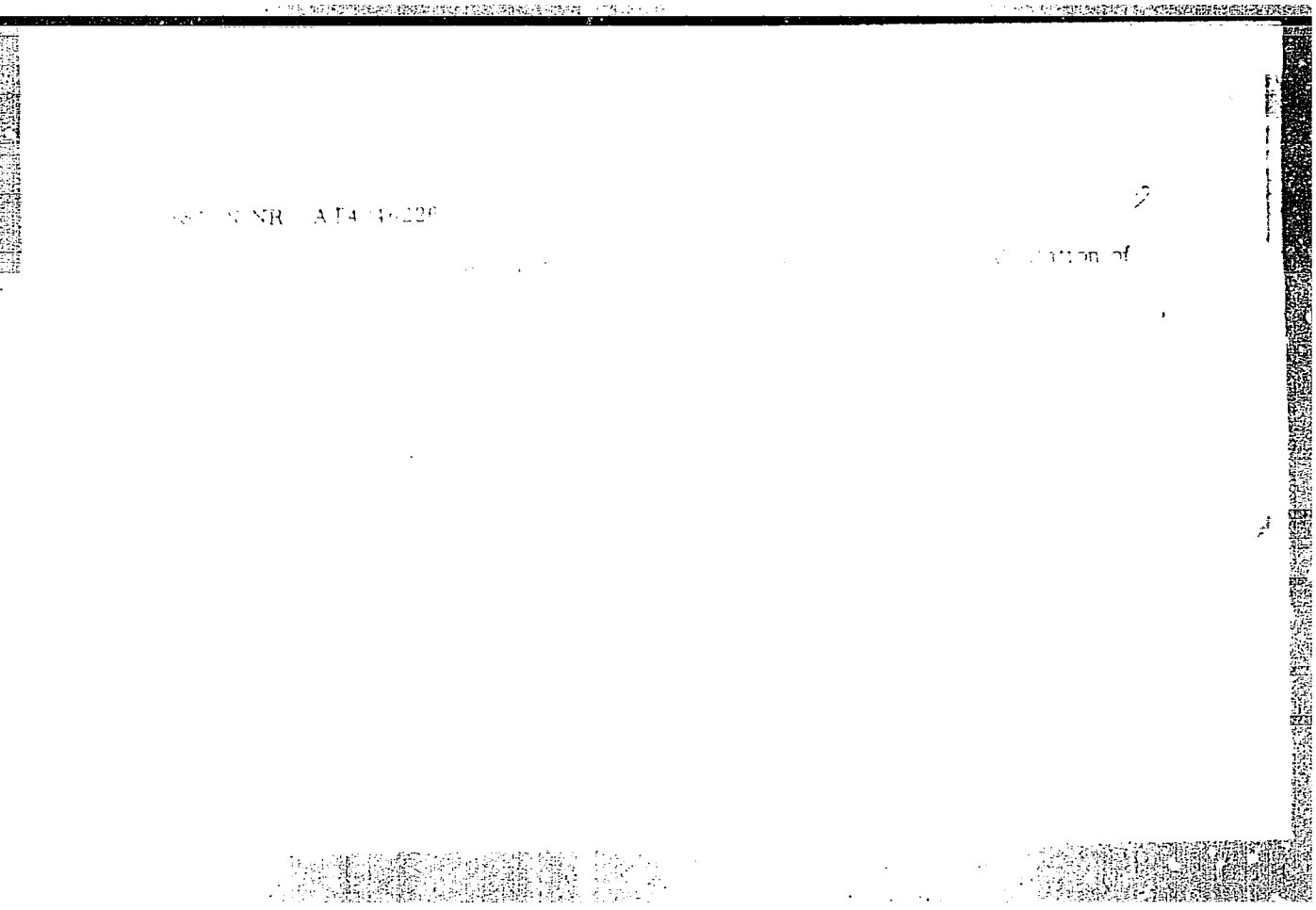
KUZNETSOV, M.G.

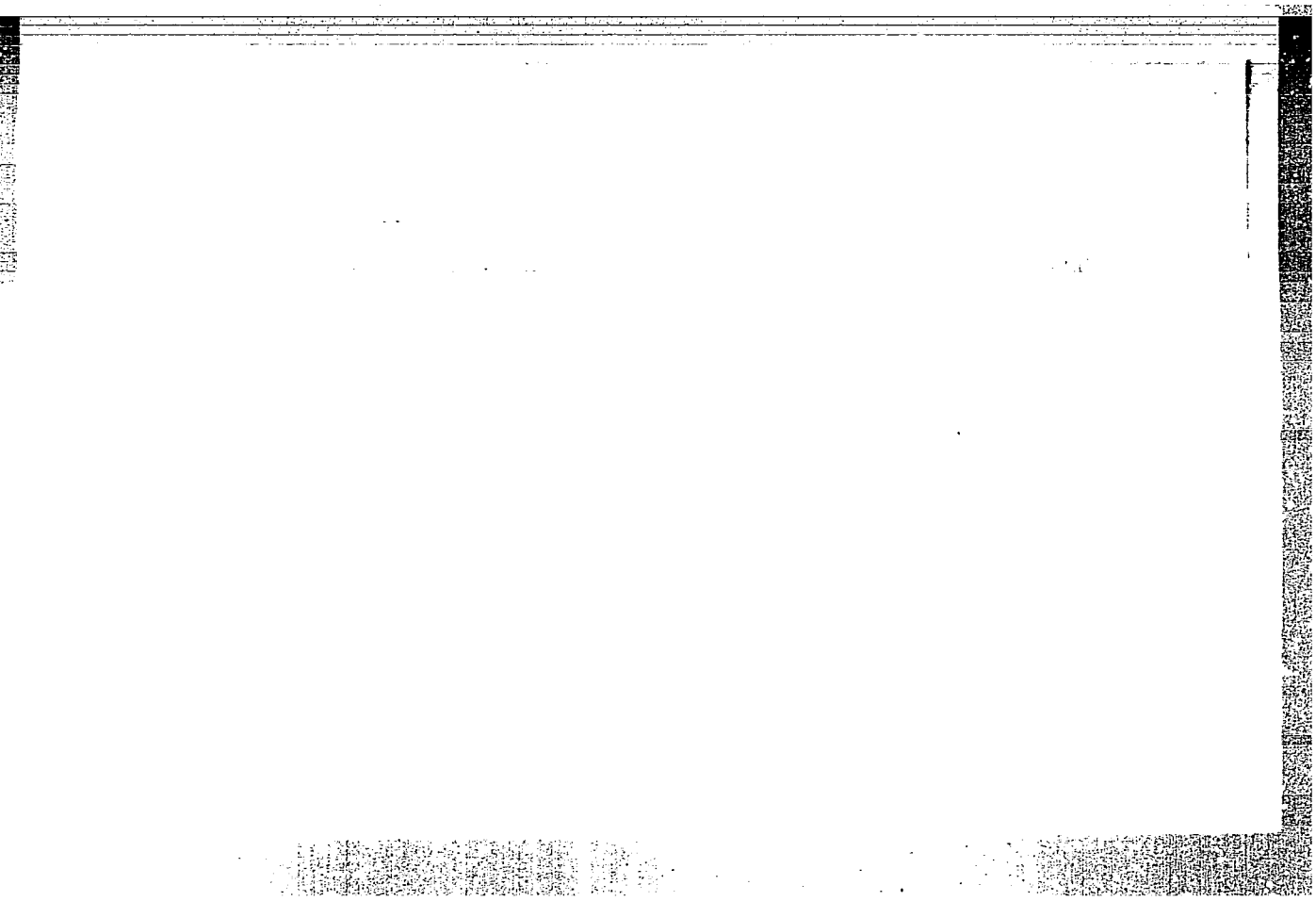
Calculation of a transient process in an amplidyne at saturation. Nauch.dokl.vys.shkoly; elektromekh. i avtom. no.1:72-79 '59. (MIRA 12:11)

1. Rekomendovana kafedroy avtomatiki i telemekhaniki Leningradskogo elektrotekhnichsekogo instituta.
(Electric motors, Synchronous) (Electric generators)



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928120015-3"





APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928120015-3"

N NR: AT4046228

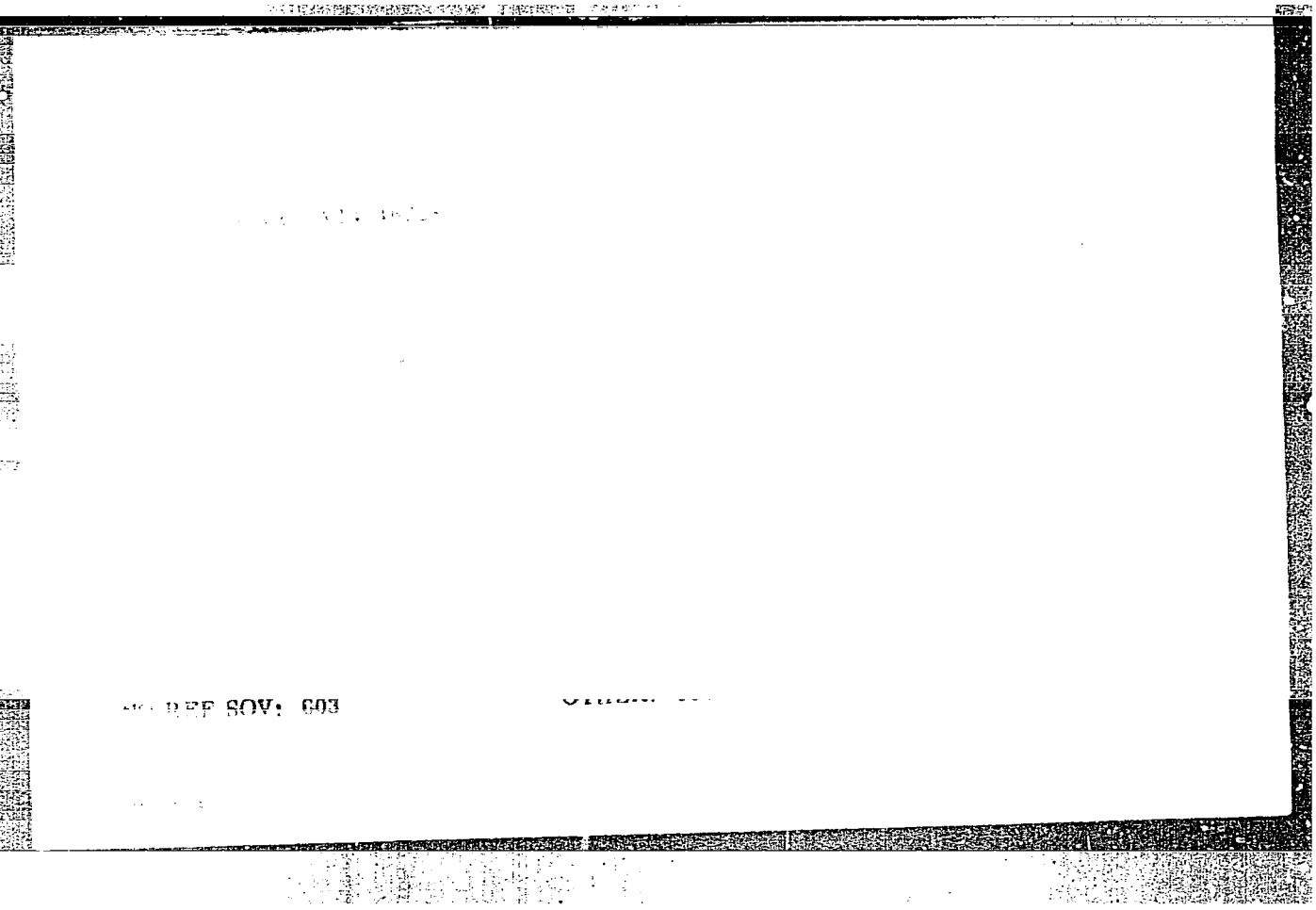
Kuznetsov, M.G., Candidate of technical sciences

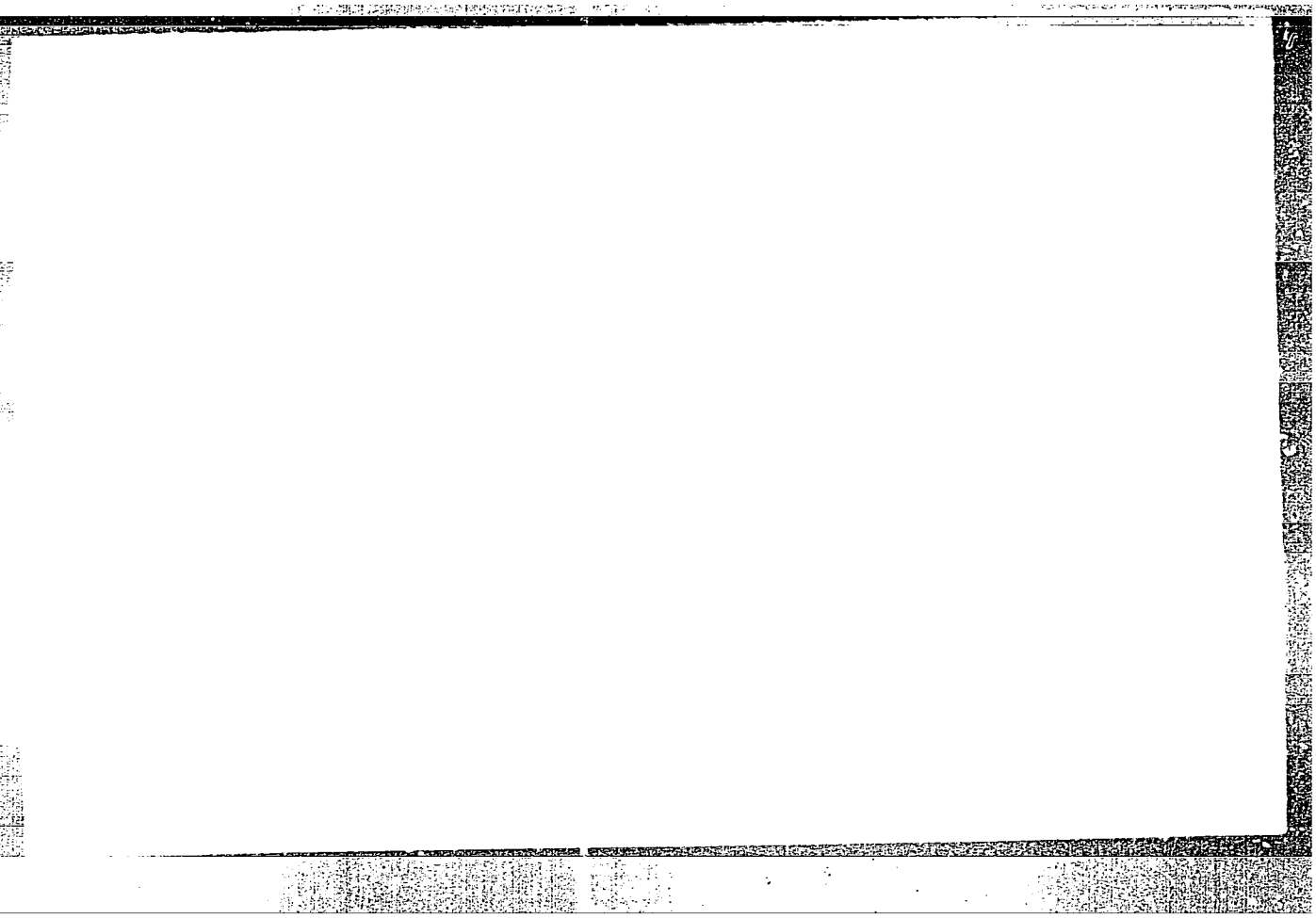
properties and calculation of zigzag waveguides for antennas with frequency

scanning in an angular sector of from -9[illegible] of the normal reading

SSION NR: AT4046228

ted by the conditions requiring the absence of secondary [illegible]
[illegible] sector is compressed [illegible] "locking" on the normal.





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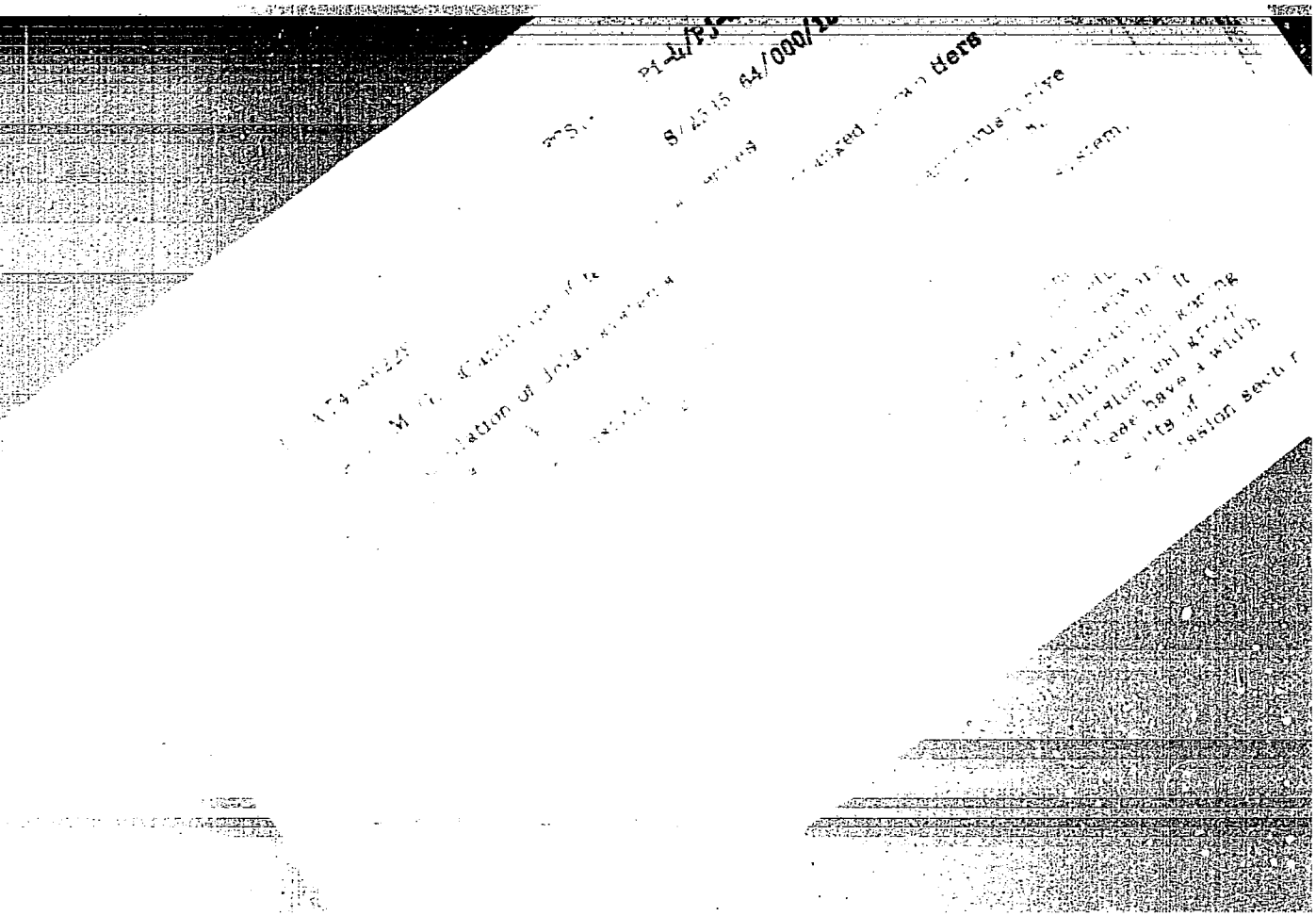
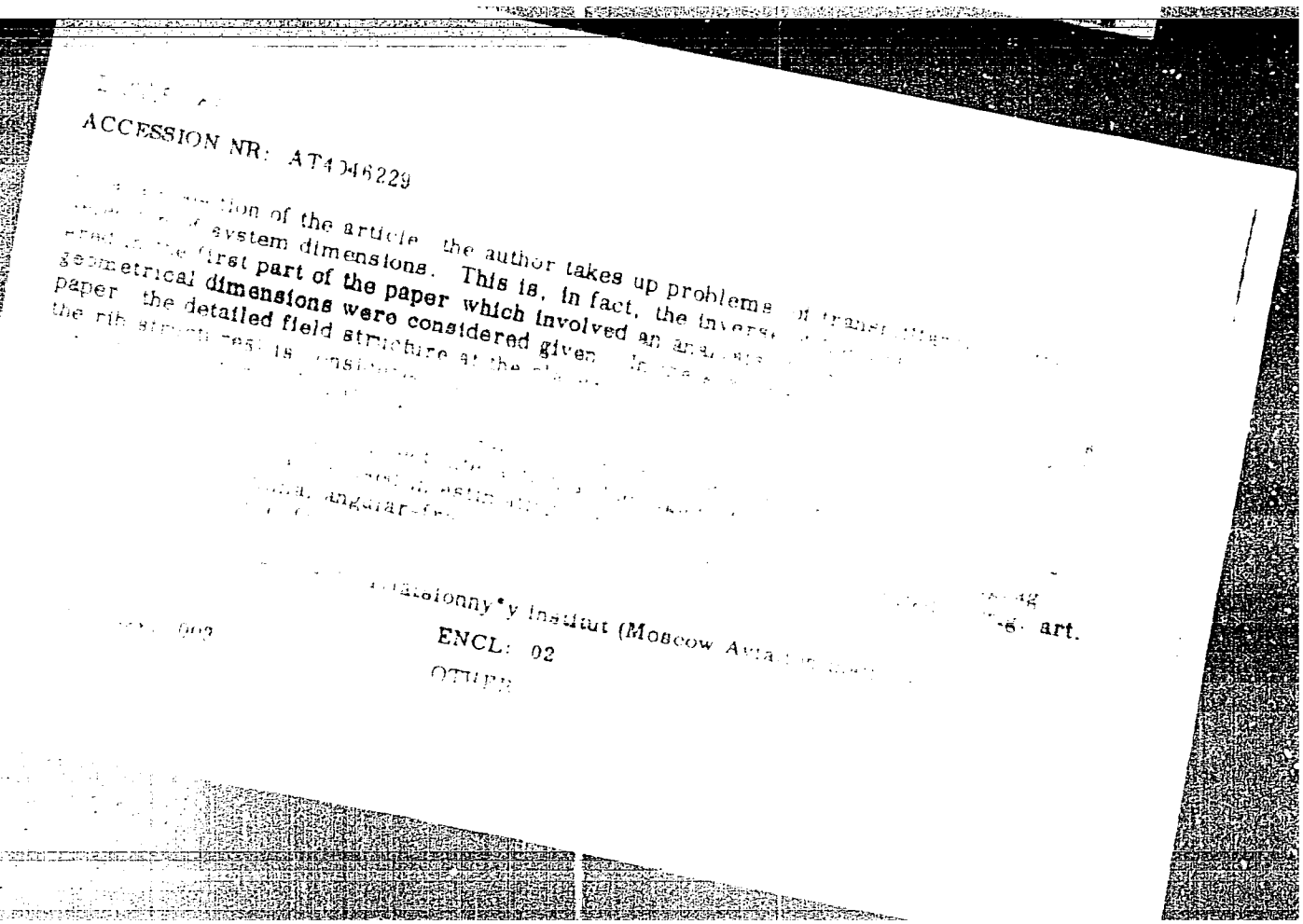


ACCESSION NR: AT4046229

lies within radiation angle limits of $\varphi \simeq 90 - +75°$. The sector is oriented on the normal, $\varphi = 0$. With a [illegible] enlarged to dimensions close to the period[illegible] an improvement of their own Q and [illegible]



ACCESSION NR: AT4046229

...tion of the article the author takes up problems ... transf...
... system dimensions. This is, in fact, the inverse ...
... first part of the paper which involved an anal...
geometrical dimensions were considered given ...
paper the detailed field structure at the ...
the rib ... is ...

... angular-...

...ionny*y Institut (Moscow Avia...

...art.

ENCL: 02

OTHER:

ACCESSION NR: AT4046229

ENCLOSURE: 01

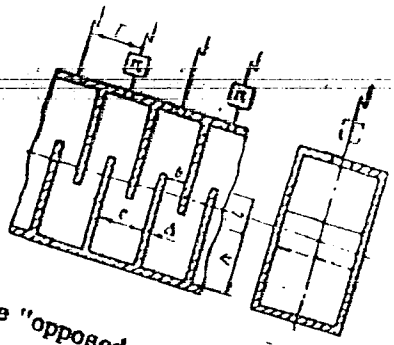
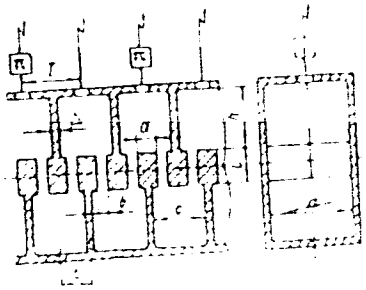


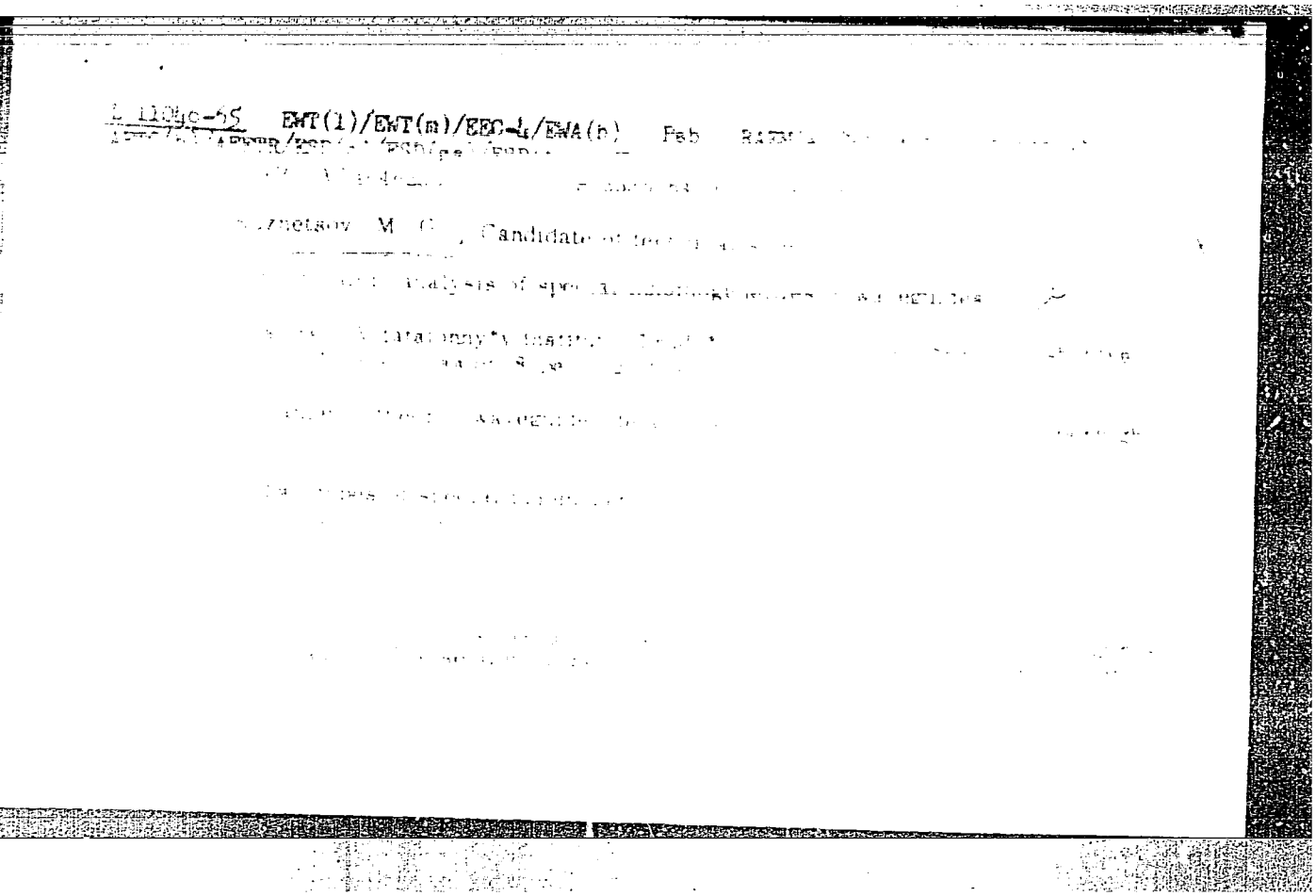
Fig. 1. Delay system of the type "opposed offset combs".

ENCLOSURE 02

ACCESSION NR: AT4046229



A system of the type [illegible]

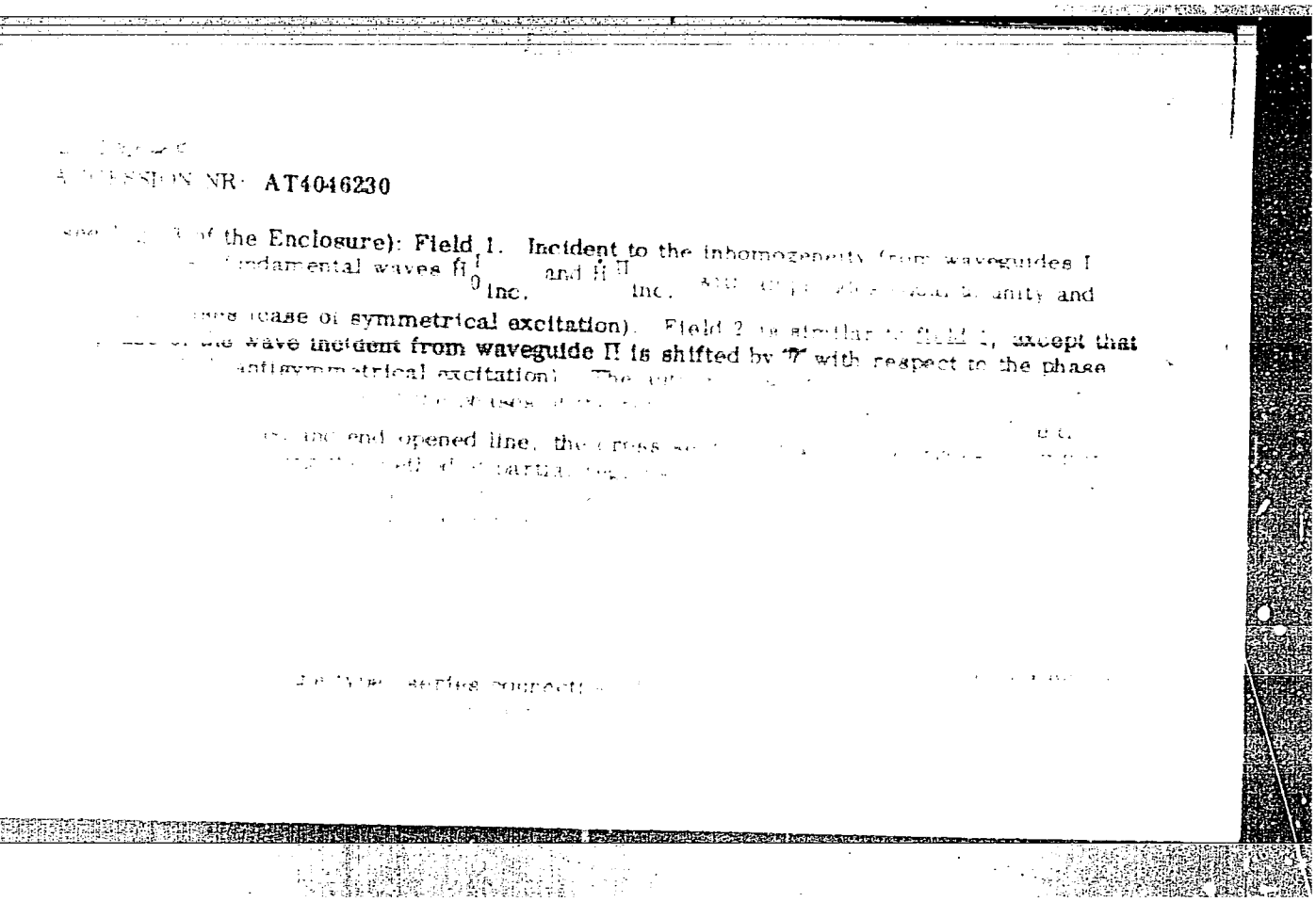


L 12040-65 EWT(1)/EWT(m)/EEC-4/EWA(h) Pab

... mode ... wave ... in plane z ...

... two of which propagate from plane z = 0 in the direction of ... and ...

unit wave of fundamental type may be regarded as the half-sum of the following two fields

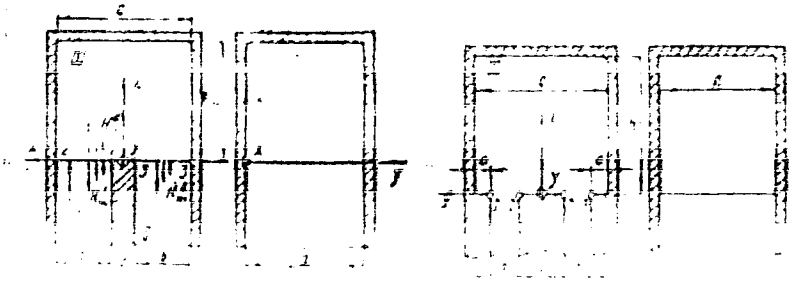


AT4046230

the Enclosure): Field 1. Incident to the inhomogeneity (from waveguides I
fundamental waves $H_{0\,inc.}^{I}$ and $H_{inc.}^{II}$
case of symmetrical excitation). Field 2 is similar to field 1, except that
wave incident from waveguide II is shifted by π with respect to the phase
antisymmetrical excitation).
end opened line, the cross

valent circuits on the basis of the reasoning given in the theoretical part of the article. The case of the waveguide turn in the E plane with $a < 1.5\lambda$ is of interest from the point of [illegible] wave guides. The equivalent [illegible]

PATENTSCHRIFT NR: AT 404623 0 INCL: 01



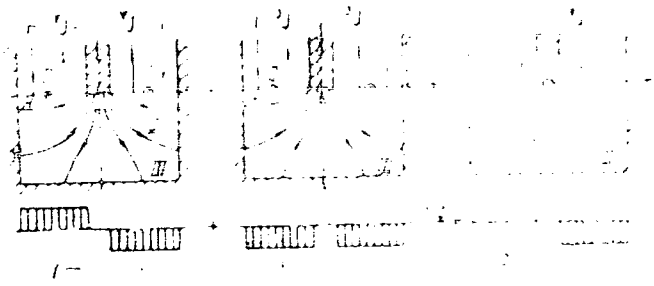


Fig. 3. Structure of fields

excitation of the inhomogeneity.

DERYUGIN, L.N.; KUZNETSOV, N.G.

Angle-frequency sensitivity of antenna lattices and its relationship to the properties of a feeding waveguide. Radiotekh. i elektron. 10 no.12:2119-2124 D '65. (MIRA 19:1)

1. Submitted August 10, 1964.

EWT(l)/EEC-4/EEC(t)/EEC(b)-2/[illegible] Pae-2
APETR/ASD/APTC(b)/ASD(a)-5/ASD(d)/RAEM(a)/ASD/[illegible]
ACCESSION NR: AT4046838

Kuz'metsov, M. G. (Candidate of [illegible])

TITLE: General problems in the construction of electrically controlled phase inverters [illegible] systems for scanning antennas

SOURCE: Moscow. Aviatsionnyy institut. Trudy. no. [illegible] 1963. Skaniruyushchiye antenny* sverkhvy*sokikh chastot (Super-high frequency scanning antennas). 239-256

TOPIC TAGS: antenna theory, [illegible] phase inverters

ABSTRACT: The author notes that [illegible] engineering

Card 1/4

SSION NR: AT4046238

...scatterers with a controlled medium which fills the ... partially and is

...characteristic of ...

...medium coupling factors ...

Card 2/4

ACCESSION NR: AT4046238

acteristics of the phase inverter. For the purpose of illustrating the expressions ob-
the paper the author directs his attention to the

Moskovskiy aviatsionnyy institut

SUBMITTED: 00 ENCL: 01 SUB CODE:

NO REF SOV: 000 OTHER: 000

Card 3/4

ACCESSION NR: AT4046238 ENCLOSURE: 01

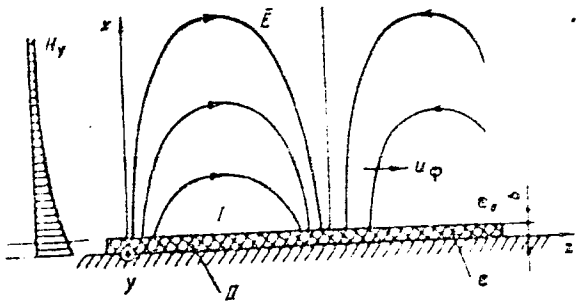


Figure 1. Metal plate covered by a dielectric layer.

Card 4/4

ACCESSION NR: AP5015254 UR/0286/65/000/009/0036/0036

[illegible]enberg, A. L.; Deryugin, L. N.; [illegible]

[illegible]error antenna with automatic [illegible] compensation.
[illegible], No. 170556

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 36

TOPIC TAGS: two mirror antenna, phase error compensation

ABSTRACT:
To reduce phase errors in the aperture of the proposed two-[illegible] and increase the possibilities [illegible] antenna gain, [illegible]

ASSOCIATION: none

Card 1/3

AP5015254

23Apr64 ENCL: 01 SUB CODE: EC

000 OTHER: 000 ATD PRESS: 4036

Card 2/3

AP5015254

Fig. 1. Two-mirror antenna

1 - large mirror; 2 - small mirror; 3 - radiating horn; 4 - phasing pickup; 5 - re- [illegible] 7 - switches; 8 - oscillator;

Card 2/3

L 27542-66 EWT(1)/[illegible] R

ACC NR: AP6007495 SOURCE CODE: UR/0109/66/011/002/0187/0194

AUTHOR: Deryugin, L. N.; Kuznetsov, M. G.

ORG: none

TITLE: Angular transparent sectors in the antenna with periodic waveguides

SOURCE: Radiotekhnika i elektronika, v. 11, no. 2, 1966, 187-194

TOPIC TAGS: waveguide antenna, antenna theory, radar antenna

ABSTRACT: Scanning arrays based on periodic waveguides and chains of phase shifters are theoretically considered. By proper selection of array parameters, the specified scanning sector can be placed within the transparent sector of the array; however, this may entail a limitation of the structure period and increased losses. The relations among the period, scanning and transparent sectors, efficiency, gain, and other characteristics are analyzed in this article; frequency-scanning antennas are dealt with. Formulas for the transparent-sector width and structure period are developed. Transparency patterns are constructed for the integer number of units between radiators; methods of obtaining phase-shifts -- unequal waveguide taps,

Card 1/2 UDC: 621.396.677.731

L 27542-66
ACC NR: AP6007495 0

adjustable couplings, waveguide-slit arrangements, two-type phase taps — are discussed. Waveguides with odd-cell symmetry (zigzag, interdigital combs, two-tier resonator chain) are also considered. The above formulas are also applicable to equidistant arrays with nonfrequency scanning. Orig. art. has: 12 figures and 9 formulas.

SUB CODE: 17, 09 / SUBM DATE: 10Aug64 / ORIG REF: 002

Card 2/2 BLG

KOVALEV, V.P.; KUZNETSOV, M.G.

Using radio waves for flaw detection. Defektoskopiia no. 5: 25-30 '65 (MIRA 19:1)

1. Leningradskiy elektrotekhnicheskiy institut imeni Ul'yanova (Lenina).

L 37138-66 EWT(a)/EWP(e)/EWT(m)/EWP(c)/EWP(v)/EWP(j)/T/EWP(k)/EWP(l) LJP(c) WW/RM/WH

ACC NR: AP6014420 (A) SOURCE CODE: UR/0381/65/000/005/0025/0030

AUTHORS: Kovalev, V. P.; Kuznetsov, M. G.

ORG: Leningrad Electrotechnical Institute im. V. I. Ul'yanov (Lenin) (Leningradskiy elektrotekhnicheskiy institut)

TITLE: Application of radio waves in defectoscopy

SOURCE: Defektoskopiya, no. 5, 1965, 25-30

TOPIC TAGS: metallurgic testing machine, radio signal, radio wave, radio transmission, flaw detection, defectoscope

ABSTRACT: A defectoscope using radio waves is described. The defectoscope consists of four parts: wave emitter, a receiver, a scanning mechanism, and a signal display device (see Fig. 1).

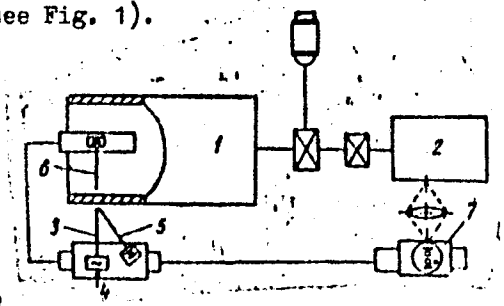


Fig. 1. Basic circuit of the mechanical part of the radio-defectoscope for testing pipes. 1 - pipe, 2 - rotating cylinder, 3 - emitting antenna, 4 - radio-wave generator, 5 and 6 - receiver antenna, 7 - fluorescent lamp.

Card 1/2 UDC: 620.179.16

3

It is shown that if the refraction of the signal at the air-object interface is neglected the distances between defects in objects to be tested may be calculated by means of the formula

$$S = \sqrt{\lambda r_0 + \lambda^2/4},$$

where λ is the wave length of the incident radiation and r_0 is the minimum possible distance between the center of defect and the point of observation. An expression for the necessary intensity of the radio wave emitter was derived

$$W_0 = \pi \frac{E^2}{k_2^2} \sqrt{\frac{\varepsilon_2}{\mu_0}} \sum_{n=1}^{\infty} (2n+1)(|a_n^r|^2 + |b_n^r|^2),$$

where E is the field intensity incident on a spherical inclusion; μ_0 is the magnetic permittivity of free space; ε_2 is the electric permittivity of the medium containing the inclusion, and a_n^r and b_n^r are constants given in the book by Dzh. A. Stretton (Teoriya elektromagnetizma, M., Gostekhizdat, 1946). It is concluded that radio-defectoscopes may be successfully applied in the detection of defects in objects made of dielectrics and poor conductors, fiber-glass plastics, rubber, ceramics, etc. Orig. art. has: 6 figures and 4 equations.

SUB CODE: 14,17/ SUBM DATE: 28Jul65/ ORIG REF: 003/ OTH REF: 003

Card 2/2 af

ACC NR: AP6021471 SOURCE CODE: UR/0413/66/000/011/0093/0093

INVENTOR: Kovalev, V. P.; Kuznetsov, M. G.

ORG: None

TITLE: Electromagnetic flaw detector. Class 42, No. 182388 [announced by the Leningrad Electrical Engineering Institute im. V. I. Ul'yanov (Lenin) (Leningradskiy elektrotekhnicheskiy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 93

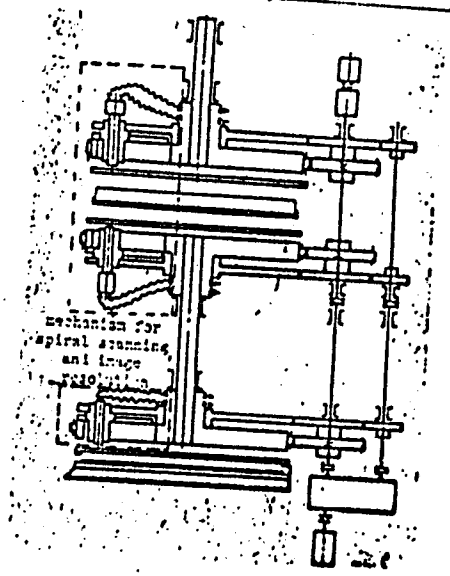
TOPIC TAGS: flaw detection, electronic equipment, SHF, body of revolution

ABSTRACT: This Author's Certificate introduces an electromagnetic flaw detector which operates in the superhigh frequency range. The installation contains a receiver, transmitter, cathode ray tube, scanning system and an image resolving system. The unit is designed for increasing productivity in checking parts having the shape of solids of revolution. The part is scanned spirally with spiral resolution of the image.

UDC: 620.179.152

Card 1/2

ACC NR: AP6021471



SUB CODE: 13, 09/ SUBM DATE: 05Feb65

Card 2/2

ACC NR: AP6021472 SOURCE CODE: UR/0413/66/000/011/0093/0094

INVENTOR: Kovalev, V. P.; Kuznetsov, M. G.

ORG: None

TITLE: A flaw detector which operates on SHF microwaves. Class 42, No. 182389 [announced by the Leningrad Electrical Engineering Institute im. V. I. Ul'yanov (Lenin) (Leningradskiy elektrotekhnicheskiy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 93-94

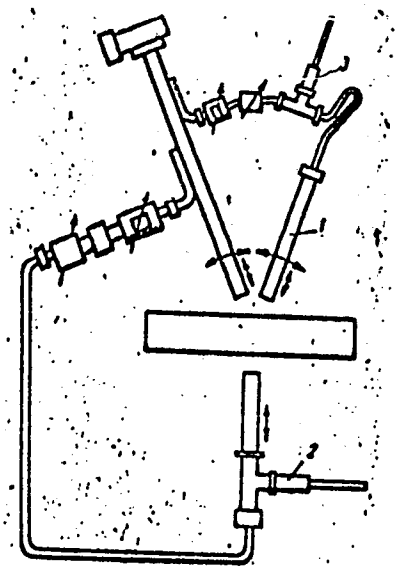
TOPIC TAGS: SHF, flaw detection, microwave detector, interferometer

ABSTRACT: This Author's Certificate introduces a flaw detector which operates on SHF microwaves. The installation contains an SHF microwave oscillator, transmitting antenna, interferometers connected into a single unit, a receiving probe antenna which fixes the diffraction fields when it is switched in, a directional coupler, attenuator, phase inverter, T-junction and detector head. The depth of a flaw is determined by using a second interferometer with a receiving probe antenna which fixes the diffraction fields before being switched in. This antenna is combined with a second detector head and the difference in signals at the output of the detector heads is used for determining flaw depth.

Card 1/2

UDC: 620.179.142

ACC NR: AP6021472



1—receiving probe antenna of the second interferometer; 2—detector head of the first interferometer; 3—detector head of the second interferometer

SUB CODE: 09, 13/ SUBM DATE: 05Apr65

Card 2/2

BUROV, A.G.; ASEYEV, P.A.; KONYAKHIN, Yu.Ya., inzh.; BAKHMATSKIY, P.A.; KOZYKIN, V.A.; KUZNETSOV, M.G., inzh.-mekhanik

Creative work of efficiency promoters. Put' i put. khoz. 9 no.11:23-24 '65. (MIRA 18:11)

1. Nachal'nik Vargashinskoy distantsii Yuzhno-Ural'skoy dorogi (for Burov). 2. Stantsiya Solntsevo, Yuzhnoy dorogi (for Aseyev). 3. Stantsiya Gruzskoye, Yugo-Zapadnoy dorogi (for Bakhmatskiy). 4. Nachal'nik Nizhneudinskoy distantsii Vostochno-Sibirskoy dorogi (for Kozykin). 5. Stantsiya Prokop'yevsk, Zapadno-Sibirskoy dorogi (for Kuznetsov).

KUZNETSOV, M.G.; LEPPIK, A.I., inzh.

Work and plans of Ukrainian airplane pilots. Zashch.rast.ot vred. i bol. 7 no.5:14-16 My '62. (MIRA 15:11)

1. Nachal'nik otdela spetsprimeneniya Ukrainskogo territorial'nogo upravleniya Grozhdanskogo vozdushnogo flota (for Kuznetsov).
(Ukraine--Plants, Protection of)
(Aeronautics in agriculture)

KUZNETSOV, M.G.; ONOYCHENKO, V.T., starshiy inzh. aviatsii spetsprimeneniya (Poltava)

Aeronautics in plant protection. Zashch. rast. ot vred. i bol. 8 no.5:9-11 My '63. (MIRA 16:9)

1. Nachal'nik otdela spetsial'nogo primeneniya Ukrainskogo territorial'nogo upravleniya Grazhdanskogo vozdushnogo flota, Kiyev (for Kuznetsov).

(Ukraine—Aeronautics in agriculture)
(Ukraine—Spraying and dusting in agriculture)

SAVIN, I.Ye., mekhanik putevykh mashin; VASIL'YEV, A.Ya., mekhanik putevykh mashin; KUZNETSOV, M.G., inzh. po mekhanizatsii

Need for the modernization of gondola cars. Put' i put.khoz. 7 no.9:47 '63. (MIRA 16:10)

1. Stantsiya Prokop'yevskaya Zapadno-Sibirskoy dorogi.

KUZNETSOV, M.I.; PETROV, I.I.; SOSKOV, A.I.

Improvement of blast furnace top fittings. Metallurg 8 no.9: 9-13 S '63. (MIRA 16:10)

1. Chelyabinskiy metallurgicheskiy zavod.
(Blast furnaces—Equipment and supplies)

KUZNETSOV, M. I.

Kuznetsov, M. I.

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SO: Knizhnaya letopis' No. 27, 2 July 1955